

Application No. 10/044,896  
Supplemental Amendment dated January 6, 2006

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (Previously presented) An anti-IFN- $\alpha$  monoclonal antibody which binds to and neutralizes a biological activity of at least IFN- $\alpha$  subtypes IFN- $\alpha$ 1, IFN- $\alpha$ 2, IFN- $\alpha$ 4, IFN- $\alpha$ 5, IFN- $\alpha$ 8, IFN- $\alpha$ 10, and IFN- $\alpha$ 21.
2. (Original) The antibody of claim 1 which is a murine antibody.
3. (Original) The antibody of claim 1 which is a humanized antibody.
4. (Original) The antibody of claim 1 which is a human antibody.
5. (Original) The antibody of claim 1 wherein said biological activity is antiviral activity.
6. (Original) The antibody of claim 5 wherein said antibody is capable of neutralizing at least 70% of the antiviral activity of said IFN- $\alpha$  subtypes.
7. (Original) The antibody of claim 5 wherein said antibody is capable of neutralizing at least 80% of the antiviral activity of said IFN- $\alpha$  subtypes.
8. (Original) The antibody of claim 5 wherein said antibody is capable of neutralizing at least 90% of the antiviral activity of said IFN- $\alpha$  subtypes.
9. (Original) The antibody of claim 5 wherein said antibody is capable of neutralizing at least 99% of the antiviral activity of said IFN- $\alpha$  subtypes.

Application No. 10/044,896  
Supplemental Amendment dated January 6, 2006

10. (Cancelled)
11. (Previously presented) The antibody of claim 1 which is murine anti-human IFN- $\alpha$  monoclonal antibody 9F3 comprising an amino acid sequence of the monoclonal antibody produced by a hybridoma having ATCC Accession No. PTA-2917, or progeny thereof or a humanized or chimeric form thereof.
12. (Previously presented) The antibody of claim 11 which is humanized anti-human IFN- $\alpha$  monoclonal antibody comprising a light chain variable domain of SEQ ID NO:3 and a heavy chain variable domain of SEQ ID NO:5.
13. (Original) The antibody of claim 1 which binds essentially the same IFN- $\alpha$  epitope as the anti- IFN- $\alpha$  antibody produced by the hybridoma cell line deposited with ATCC on January 18, 2001 and having accession No. PTA-2917.
14. (Original) The antibody of claim 1 which is of the IgG class.
15. (Original) The antibody of claim 14 which has an IgG<sub>1</sub>, IgG<sub>2</sub>, IgG<sub>3</sub>, or IgG<sub>4</sub> isotype.
16. (Original) The antibody of claim 1 which is an antibody fragment.
17. (Original) The antibody of claim 16 which is a Fab fragment.
18. (Original) The antibody of claim 16 which is a F(ab')<sub>2</sub> fragment.
19. (Original) The antibody of claim 16 which is a Fab' fragment.
20. (previously presented) An antibody, or antigen binding fragment thereof, comprising a heavy chain variable domain and a light chain variable domain, wherein the light

Application No. 10/044,896  
Supplemental Amendment dated January 6, 2006

chain variable domain comprises the following CDR's:

- (a) L1 of the formula RASQSVSTSSYSYMH (SEQ ID NO: 7);
- (b) L2 of the formula YASNLES (SEQ ID NO: 8); and
- (c) L3 of the formula QHSWGIPRTF (SEQ ID NO: 9);

and wherein the antibody or antigen binding fragment specifically binds to at least IFN- $\alpha$  subtypes IFN- $\alpha$ 1, IFN- $\alpha$ 2, IFN- $\alpha$ 4, IFN- $\alpha$ 5, IFN- $\alpha$ 8, IFN- $\alpha$ 10, and IFN- $\alpha$ 21.

21. (Currently amended) ~~The~~ An antibody or antigen binding fragment thereof of claim 20, wherein the antigen binding fragment ~~which~~ comprises a Fab.

22. (Previously presented) An antibody, or antigen binding fragment thereof, comprising a light chain variable domain and a heavy chain variable domain, wherein the heavy chain variable domain comprises the following CDR's:

- (a) H1 of the formula GYTFTEYIIH (SEQ ID NO: 10);
- (b) H2 of the formula SINPDYDITNYNQRFKG (SEQ ID NO: 11); and
- (c) H3 of the formula WISDFFDY (SEQ ID NO: 12);

and wherein the antibody or antigen binding fragment specifically binds to at least IFN- $\alpha$  subtypes IFN- $\alpha$ 1, IFN- $\alpha$ 2, IFN- $\alpha$ 4, IFN- $\alpha$ 5, IFN- $\alpha$ 8, IFN- $\alpha$ 10, and IFN- $\alpha$ 21.

23. (Currently amended) ~~The~~ An antibody or antigen binding fragment thereof of claim 22, wherein the antigen binding fragment ~~which~~ comprises a Fab.

24. (Previously presented) An anti-IFN- $\alpha$  antibody comprising
- (A) at least one light chain or an antigen binding fragment thereof, comprising the following CDR's:
    - (a) L1 of the formula RASQSVSTSSYSYMH (SEQ ID NO: 7);
    - (b) L2 of the formula YASNLES (SEQ ID NO: 8); and
    - (c) L3 of the formula QHSWGIPRTF (SEQ ID NO: 9); and
  - (B) at least one heavy chain or an antigen binding fragment thereof, comprising the following CDR's:

Application No. 10/044,896  
Supplemental Amendment dated January 6, 2006

- (a) H1 of the formula GYTFTEYIIH (SEQ ID NO: 10);
- (b) H2 of the formula SINPDYDITNYNQRFKG (SEQ ID NO: 11); and
- (c) H3 of the formula WISDFFDY (SEQ ID NO: 12).

25. (Original) The antibody of claim 24 having a homo-tetrameric structure composed of two disulfide-bonded antibody heavy chain-light chain pairs.

26. (Original) The antibody of claim 24 which is a linear antibody.

27. (Original) The antibody of claim 24 which is a murine antibody.

28. (Original) The antibody of claim 24 which is a chimeric antibody.

29. (Original) The antibody of claim 24 which is a humanized antibody.

30. (Original) The antibody of claim 24 which is a human antibody.

31-41. (Cancelled)

42. (Previously presented) A hybridoma cell line comprising a nucleic acid molecule encoding an antibody of claim 1.

43. (Original) A hybridoma cell line deposited with ATCC on January 18, 2001 and having accession No. PTA-2917.

44. (Original) An antibody produced by the hybridoma cell line of claim 42.

45-54. (Cancelled)

Application No. 10/044,896  
Supplemental Amendment dated January 6, 2006

55. (Previously presented) The anti-IFN- $\alpha$  antibody of claim 1 which does not neutralize IFN- $\beta$ .

56. (Previously presented) The anti-IFN- $\alpha$  antibody of claim 1 which specifically binds to and neutralizes all IFN- $\alpha$  subtypes.

57. (Previously presented) A host cell comprising a nucleic acid molecule encoding an antibody of claim 1.

58. (Previously presented) A host cell comprising a nucleic acid molecule encoding an antibody of claim 24.

59. (Previously presented) A host cell comprising a nucleic acid molecule encoding an antibody of claim 12.

60-61. (Cancelled)

62. (Previously presented) A host cell comprising a nucleic acid molecule encoding an antibody of claim 20.

63. (Previously presented) A host cell comprising a nucleic acid molecule encoding an antibody of claim 22.